

# Washington School Research Center

## **On the Road to Second-order Change:**

What Washington State Educators Say about  
Collaboration, Instructional Enhancement, and  
Fundamental Change

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**The Washington School Research Center (WSRC)** is an independent research and data analysis center within Seattle Pacific University. The Center began in July 2000, funded through a gift from the Bill & Melinda Gates Foundation. Our mission is to conduct sound and objective research on student learning in the public schools, and to make the research findings available for educators, policy makers, and the general public for use in the improvement of schools. We believe that sound data and appropriate data analysis are vital components for the identification of school and classroom practices related to increased student academic achievement.

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A Research Report From  
The Washington School Research Center



Washington School Research Center



## **Acknowledgments**

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<sup>1</sup> Parts of this literature review were taken from and adapted from the WSRC publication A Decade of Reform (2006).





# ON THE ROAD TO SECOND ORDER CHANGE

(WSRC – WASHINGTON EDUCATOR SURVEY)

## INTRODUCTION

The purpose of this study was to explore the nature of recent educational reform efforts in Washington State and to determine what educators believe to be the most important future areas of focus. In particular, we wanted to determine whether school-wide improvement efforts (i.e. School Improvement Plans (SIPs), School Improvement Teams (SITs), professional development, etc) were making a difference for teachers. To do so we explored issues related to school and classroom improvement efforts and the impact at the school, teacher, and student levels. In addition, we asked teachers to prioritize their greatest needs in the future if they are to realize the goals of this reform (ALL students achieving). Finally, once we identified the nature of the work, we wanted to explore the relationship between those efforts and student achievement (gains).

To a large degree, this study had roots in the 1997 survey work of Fouts (1998), Baker (1998), Mork(1998), Van Slyke (1998), which resulted in developing the concept of *First & Second Order Change*. The concept of First and Second Order Change in Washington State builds upon the work of Tyack & Cuban (1995) and Goodman (1995). All three wrote about the ideas behind first order change and how it results in greater efficiency, but does not change the essence of the educational experience. In contrast, radical reform or second order change, alters the underlying philosophical beliefs driving practice: This is the type of changes Fouts and others sought to identify in the 1997 state-wide teacher survey project.

Elements of the 1997 survey were used to formulate the survey questions for this study (Baker 1998). While the specific survey items were updated to reflect nearly two decades of educational development and jargon, the basic nature of exploring school-level and classroom-level efforts remained constant.

The findings of this study will be helpful to parents, school administrators, educational practitioners, educational policy makers, and other educational leaders in the state of Washington. It will provide a greater understanding of (1) the nature of the work that has occurred over the last several years; (2) the needs that continue to face educators in the coming decade, and (3) the impact of educational reform efforts in Washington State. Individual benefits will be in terms of school and district level (aggregate) findings.

## LITERATURE REVIEW<sup>2</sup>

### Washington State Education in the Context of National Education Reform

National concerns in education over the last several years have centered on whether we are preparing students to enter into a competitive global economy. Increasingly, new jobs require more education than a high school degree. Some estimate that approximately two-thirds of jobs will require some post-secondary education or a bachelor's degree by 2010 (Carnevale & Desrochers, 2003). The alarmingly high national drop-out rates (estimated to be about 25-30%) have many worried that American students are falling behind other industrial nations and will not be able to compete for jobs in an increasingly diverse and global economy (Bergeson & Heuschel, 2006).

Students pursuing post-secondary education often are not prepared to engage in high-level classes upon entry. This is exemplified by the percentage of students engaging in remedial math and English courses at the post-secondary level. According to a National Center for Education Statistics (NCES) study, 42% of community college freshman and 20% of four-year college freshman enroll in at least one remedial course (NCES, 2004a). Additionally, students taking these remedial courses (in particular remedial reading) are more likely to drop out of college (NCES, 2004b). In Washington State for the class of 2004, approximately 32% of high school graduates were enrolled in remedial math and 16% were enrolled in remedial English upon entering college (OSPI Washington State Graduate Follow-up Study).

In a national effort to reinforce the idea of ALL students meeting high academic standards, the No Child Left Behind (NCLB) Act was signed by President George W. Bush in January 2002. This effectively reauthorized and amended federal education programs established under the Elementary and Secondary Education Act (ESEA) of 1965. The main goal of NCLB is to provide all children with an equal opportunity to engage in high-quality education. The U.S. Department of Education has highlighted four areas of emphasis within NCLB. These areas are accountability, flexibility, research-based education, and parent options. Accountability ensures that all students who are disadvantaged have the opportunity to achieve academic proficiency. Flexibility allows school districts to decide how to use federal funds to improve achievement. Research-based education means that schools and districts should utilize scientifically effective educational programs and practices. Finally, parent options increase the choices available to parents of students attending schools accepting federal dollars.

Washington State reform efforts grew out of national concern that students were not being adequately prepared by the American school system. Because of this growing concern, Washington State began educational reform efforts in 1993 under the Washington State Education Reform Act. Educational reform efforts emphasized the development of a performance-based system. Special efforts were made to provide schools with flexibility in making individual school decisions on how to improve academic achievement for all students. School reform began with focus on collaboration; clearer student performance outcomes; and modifications to curriculum, assessment, and instruction. The Essential Academic Learning Requirements (EALRs) were created to identify what students should know, and be able to do, in

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<sup>2</sup> Parts of this literature review were taken from and adapted from the WSRC publication *A Decade of Reform* (2006).

certain grade levels in the core academic areas. Reform efforts demonstrated a huge shift from being concerned primarily with the amount of time students spent in the classroom, to being concerned with the end product.

The current foci of Washington State reform efforts include high school reform, district improvement, and math and science reform. An umbrella goal over all of these focus areas is the education of ALL students, which would result in a reduction in the disparity in achievement for low income, ethnically diverse, and Limited English Proficient (LEP) students. Concern around the performance of Washington State high schools has led the Office of Superintendent of Public Instruction (OSPI) to support numerous initiatives and programs at the high school level aimed at providing the skills and knowledge necessary for students to successfully engage in post-secondary college and career opportunities. OSPI has also sponsored district improvement efforts in the last several years by expanding their School Improvement Assistance Program to focus on district improvement, as well. Through these funds, several districts received expanded services to support system-wide improvement efforts. A growing number of programs focused on improving achievement scores in the areas of math and science are also present in Washington State. Programs such as the Mathematics and Science Partnership, Transition Math Project, and Leadership and Assistance for Science Education Reform (LASER) are aimed at improving student performance in these areas.

One of the major recommendations included fully integrating early learning, K-12, and post-secondary systems to create smoother transitions from one to the other. Other recommendations included ensuring that all children enter school prepared and that students master skills so they can thoughtfully participate and productively work in their communities. Emphasis was placed on closing the academic achievement gap between upper-class students in the majority culture and low-income, minority students. A final major suggestion included making higher education and workforce training opportunities more affordable and applicable.

### **On the Road to Reform**

Washington State reform efforts were intended to bring about fundamental second order change; that is, a fundamental shift in thinking about student achievement and a fundamental change in the nature of classroom teaching and learning. These efforts grew out of the national concern that students were not being adequately prepared by the American school system. Because of this growing concern, Washington State began educational reform efforts in 1993 under the Washington State Education Reform Act.

Educational reform efforts emphasized the development of a performance-based system. Special efforts were made to provide schools with flexibility in making individual school decisions on how to improve academic achievement for all students. School reform began with focus on collaboration; clearer student performance outcomes; and modifications to curriculum, assessment, and instruction. The Essential Academic Learning Requirements (EALRs) were created to identify what students should know, and be able to do, in certain grade levels in the core academic areas. Reform efforts demonstrated a huge shift from being concerned primarily with the amount of time students spent in the classroom, to being concerned with the end product (student learning).

On a macro level, the current foci of Washington State reform efforts include high school reform, district improvement, and math and science reform. An umbrella goal over all of these focus areas is the education of ALL students, which would result in a reduction in the disparity in achievement for low income, ethnically diverse, and Limited English Proficient (LEP) students. Concern around the performance of Washington State high schools has led the Office of Superintendent of Public Instruction (OSPI) to support numerous initiatives and programs at the high school level aimed at providing the skills and knowledge necessary for students to successfully engage in post-secondary college and career opportunities.

OSPI has also sponsored district improvement efforts in the last several years by expanding their School Improvement Assistance Program to focus on district improvement, as well. Through these efforts, several districts received expanded services to support system-wide improvement efforts. Additionally, a growing number of programs focused on improving achievement scores in the areas of math and science are also present in Washington State. Programs such as the Mathematics and Science Partnership, Transition Math Project, and Leadership and Assistance for Science Education Reform (LASER) are aimed at improving student performance in these areas.

In 2005, the legislature passed a Bill (SB 5441) to create the Washington Learns Steering Committee. The main impetus for creating this committee was concern that students in Washington State and other states around the country are falling behind academically and will not be able to compete in today's global economy. Governor Christine Gregoire co-chaired the Washington Learns Steering Committee. Advisory committees on early learning, K-12, and higher education were also established. Committee members included business, community, education, government, and minority leaders from around the state. The goal of the group was to thoroughly review the current educational system in Washington State and to present comprehensive suggestions for reform. After a year of meetings and intensive study, the advisory committees and steering committee developed a report including long-term suggestions for transforming the Washington State educational system into a —World-class, learner-focus, seamless education” system (Washington Learns, 2006, p. 1).

It is within this context of creating a world-class system that we launched our exploration into the nature of the efforts around the state. The nature of student learning is at the heart of the current reform efforts. These outcomes represent significant changes in what we expect from students and present real challenges to the educational system as it now exists.

Those who have been around for a number of years have experienced numerous —reform” efforts in education. In fact, it is difficult to think of a time when there were not new things being tried in education to make the system better for children. Educational fads have come and gone at an incredible rate, often leaving teachers with the —weried that” syndrome. There are countless books documenting these movements over the last several decades, but yet in many places schools remain remarkably unchanged.

According to Fouts (2006):

There is evidence that one of the reasons schools remain unchanged is that the reforms or changes have been superficial in nature and/or arbitrary in their adoption. Teachers and

schools often went through the motions of adopting the new practices, but the changes were neither deep nor long-lasting. In other words, the outward manifestations of the changes were present, but the ideas or philosophy behind the changes were either not understood, misunderstood, or rejected. Consequently, any substantive change in the classroom experience or school culture failed to take root.

In their book on school restructuring, Ellis and Fouts (1994) compared bureaucratic/centralized reform with authentic/fundamental reform. They defined bureaucratic/centralized reform as changes in the bureaucratic structure of the schools and district, changes to the time schedule, decision-making procedures, administrative structures, and the like. This type of reform effort, they maintained, is often top-down in nature, atheoretical, and seldom penetrates to the classroom level.

In contrast, Ellis and Fouts described what they call authentic/fundamental reform that is driven by a clear and accepted set of ideas that differ in meaningful ways from the ideas serving as the basis for the status quo. The focus of the efforts are on the beliefs and philosophies driving practice, with the recognition that while changes in the structure and organization of the school are perhaps necessary, those changes alone are insufficient to bring meaningful and lasting change to the school and classroom.

Research on school reform over the last decade has suggested that certain practices that provide a qualitatively different experience for students are important for higher achievement. Additionally, these practices are usually based on changes in the ideas and philosophy driving educator practice and the school culture, rather than those practices identified as first order changes. Unfortunately, researchers have seen many schools focusing their efforts and energies on a long list of changes that, in all probability, will not change to any degree the qualitative experience of most students. These efforts are sometimes accompanied by teacher skepticism, subversion, and questions such as: “Why are we doing this?”—a fairly strong indication that second order change is not happening.

With this as our back drop, we wanted to explore whether some of the many educational changes over the last several years have worked their way into becoming meaningful philosophical (second-order) changes that positively impact student learning.

## METHODS

### Participants

The participants in this study were respondents to individual surveys administered through district and school offices in the state of Washington. Researchers from the WSRC sent recruitment letters in January, 2007 and surveys to participating districts in February, 2007. By March 30, 2007, district survey coordinators (superintendent or designee) were responsible for distribution, collection, and return of surveys to the WSRC. Superintendent recruitment letters and surveys included a statement of respondent anonymity and confidentiality (see Appendix A).

We identified the respondents using a stratified random sampling process that took into account district size, ethnicity, and free/reduced lunch levels. This resulted in a sample of approximately 12% of the state's school population which represented approximately 6,500 school staff, from 228 schools, within 38 Washington State districts.

Of the surveys sent, 2306 were returned for a 36% return rate. Respondents represented 18 (of 38) school districts and 98 (of 228) schools throughout the state. Elementary, middle, and high school staff completed the surveys. Of the 2306 returned surveys, 2039 were from teaching staff. Few surveys were returned by staff in other categories (classified, administration, and others), but the primary focus of the study was the perspective of the teachers regarding the reform efforts in the state. It is the teacher respondents that form the study group of the project.

We could not resurvey the districts to improve the response rate due to restrictions on staff time. Therefore, in order to bolster our confidence in a representative sample, we arranged for a separate administration of the survey to a small number of individuals in schools from the group that had not returned the original survey using incentives (coffee gift cards) to ensure a higher rate of return from this —calibration group.” We selected seven of the non-responding districts, and randomly selected five teaching staff from schools within the districts to respond to the survey. Fifty-four percent (114 of 213) of the staff from all seven districts responded.

This calibration sample provided a way to assess the general comparability of the non-respondents to the initial mailed survey to those who did respond. While this could not compensate for low return rate to the initial survey (especially since we did not get 100% return to the re-surveyed group), it could help to build confidence in the survey findings and in the greater generalizability of the findings.

### Comparability of the Sample

We used a test of binomial proportions to determine whether the original sample of teachers was proportionately characteristic of the population of teachers in the state of Washington. Results demonstrated non-significant differences ( $z = 1.3$ ) for gender proportions in the sample compared to gender proportions in the state population. This suggested that the gender make-up in the sample of teachers was comparable to that of all teachers in the state. A second z-test indicated non-significant differences ( $z = -1.83$ ) for gender proportions in the calibration sample of teachers compared to gender proportions in the overall population. This

also suggested that the gender make-up in the calibration sample of teachers was comparable to that of all teachers in the state.

We then examined the differences in years of teaching experience between our samples and the state as another source of confidence in the representativeness of our samples. An independent t-test revealed significant differences ( $t = 3.85$ ,  $p < .001$ ) between teachers in the state and the teachers from our primary sample. However, with a sample this large, the difference in means (sample = 14.22; state = 13.35), while statistically significant, was less than one year (from an overall range in the state of 0 years to over 45 years). Moreover, the effect size of .09 suggests that with a difference of less than one year's experience, the finding is not particularly meaningful. We found comparable results in a comparison of the calibration sample of teachers to individual teachers in Washington. Independent t-tests revealed non-significant differences between the total sample and the calibration sample with respect to gender and total years of teaching experience.

Taken together, we cannot assume that our sample is highly representative of the state. However the aforementioned analyses help to demonstrate greater support that, despite a low return rate in the initial sample, our respondents are generally comparable to the overall population of teachers throughout the state in gender and teaching experience.

## Instrumentation

We used a questionnaire designed to elicit teacher responses regarding the nature of the reform efforts in Washington schools over the last several years. The "Washington Educator Survey" (WES) was adapted from an earlier version used several years (1997) ago for a similar study on education reform. The questionnaire contained 44 items in four sections along with 5 demographic items. Some of the items were changed or updated from the original instrument, and a new section was added that called for teacher rankings of important future teacher support that was needed for improving student learning. We did not standardize the original questionnaire, but we conducted factor analyses that yielded reliable factors.

## Washington Educator Survey Factor Analyses

We conducted factor analyses on the main sections of the current questionnaire (WES) to provide a measure of construct validity and to compare the resultant factors with those from the earlier study. The factors from the two studies were generally comparable. The results in Table 1 show the items that represent teachers' general sense of school processes. Table 2 results show the items that represent teacher opinions regarding *results* of the school improvement plan changes.

**Table 1**

### WES Index Items – Teacher's General Knowledge

#### WES ITEMS

*Please indicate the degree to which you agree or disagree with each of the following statements.*

### **School Structural Items**

- Our school improvement team is effective in leading change efforts.
- Our school improvement efforts have been guided by clearly articulated goals.
- Our school improvement plan plays an important role in our school.
- School improvement decisions are made collaboratively.
- I believe improvement at our school will be sustainable over time.
- Building administrator(s) have had a key role in improving our school.
- My input has been relevant to the improvement of my school.
- I have more time to get to know my students as a result of our school improvement efforts.
- We have been focused on changing the structure of our school (i.e. scheduling, advisory, small learning communities, governance, etc).
- Teacher leaders have had a key role in improving our school.

### **Classroom Instructional Items**

- Students in my classroom apply knowledge in a relevant context.
- Students in my classroom learn by working collaboratively with peers.
- The focus of my classroom is on developing conceptual knowledge; not just recall.
- Students in my classroom apply knowledge in a real-world context.
- Students in my classroom have an opportunity for personal reflection on what they have learned.

Response categories: 1 – Strongly disagree

2 – Disagree

3 – Neutral

4 – Agree

5 – Strongly agree

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Table 2

**WES Index Items – Changes Post-Reform****WES ITEMS**

*Please indicate the degree to which you agree or disagree with each of the following statements. As a result of the changes in our school...*

**School Impact Items**

- Teachers have more data available to help inform decisions about teaching and learning.
- More teachers are using data to inform decisions about teaching/learning.
- Parents have a better understanding why we need to change.
- We have aligned professional development opportunities to support the school improvement plan.
- We have narrowed the focus of our professional development.
- I have a better understanding why our school has adopted our present change/improvement strategy.

**Teacher Impact Items**

- I have received the support I need to align my instructional practices.
- Teachers have more time to concentrate on important teaching and learning issues.
- I have more collaboration time with my colleagues.
- Teachers are working collaboratively at least once per week.

**Student Impact Items**

- Teachers have raised expectations for student academic performance.
- Teachers have become more intentional about what they/we teach.

Response categories: 1 – Strongly disagree

2 – Disagree

3 – Neutral

4 – Agree

5 – Strongly agree

Exploratory factor analyses extracted the five factors shown in Tables 1 & 2: School Structural, Classroom Instructional, School Impact, Teacher Impact and Student Impact. The data in Table 3 show the range of correlations of the items within each of the five factors<sup>3</sup> along with reliability estimates of the resultant indices.

**Table 3**

**Exploratory Factor Analysis and Reliability Analysis for Washington School Teachers.**

<b>Factors</b>	<b>Factor Correlations</b>	<b>Eigenvalues</b>	<b>Reliability Estimates<sup>4</sup></b>
-Section 1-			
School Structural	.523 -.806	5.875	.88
Classroom Instructional	.664 -.780	2.012	.76
-Section 2-			
School Impact	.549 -.722	5.785	.79
Teacher Impact	.605 -.795	1.415	.74
Student Impact	.787 -.823	1.120	.75

### Data Analyses

The five factors extracted from the current questionnaire resulted in reliable indices and helped to establish a measure of construct validity in the study. We used these indices in several analyses to determine whether or not we could create a predictive model of how structural elements and changes to teaching practice affected the teachers' opinions regarding their instruction and student learning. In addition to these analyses, we conducted several exploratory analyses to describe the teachers' opinions reported in the primary sections of the survey.

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<sup>3</sup> Data reported on final items used for teacher indices. "Factor Correlations" avoids the use of "factor loadings," a term objectionable to some researchers for these results.

<sup>4</sup> The reliability estimates reported are Cronbach's Alpha figures.

## RESULTS

Several important findings emerged from our analyses of the survey data. The descriptive findings for some of the items yielded surprising insights into teachers' opinions regarding the efficacy of school reform efforts over the last several years and the extent to which they believed their instructional efforts were impacting student learning. Our attempts to create models connecting teachers' views on school and classroom aspects of learning with student performance outcomes were frustrated by a general lack of variability in school scores.

### Descriptive Findings

Table 4 shows the mean index scores and standard deviations for teacher respondents.<sup>5</sup> Figure 2 represents the same scores in a bar graph. Since the range of possible values on the indices is from 1 to 5, the scores indicate general agreement with the items that comprise the indices (a score of approximately "4"), with the exception of the —teacherimpact" index. The mean score of 3.02 on this index is a neutral response indicating that the teachers neither agree nor disagree that they have time to align their instructional practices, collaborate with colleagues, or concentrate on important teaching and learning issues. They were much more likely to agree that their school improvement plan was working, that students were engaging in meaningful learning, and that professional development and other support was available to support teachers.

**Table 4**

#### Index Means and Standard Deviations for Washington School Teachers.

School Structural	Classroom Instructional	School Impact	Teacher Impact	Student Impact
3.72 (.60)	4.11 (.49)	3.56 (.59)	3.02 (.84)	3.99 (.63)

<sup>5</sup> The means are aggregated across all teacher respondents with categories from 1 —strongly disagree" to 5 —strongly agree."

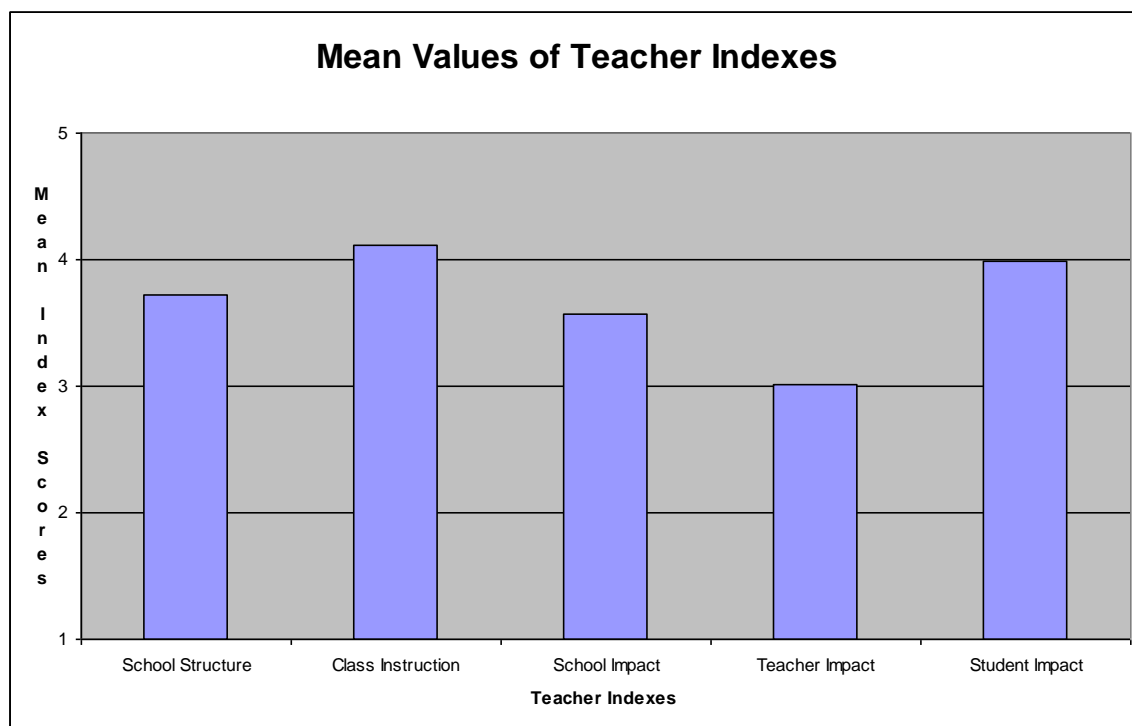


Figure 2. Mean index scores for teacher respondents on the WES.

### Changes in School and Classroom Structure

Table 5 displays the items and percentages that represent teachers' knowledge of changes that have taken place after school improvements have occurred. In general, the items grouped into three distinct categories: "Yes," "No," and "Split Opinion." The percentages for each item clearly demonstrate distinct teacher opinions regarding school changes that have been instituted in response to improvement plans.

The following are some findings taken from the analysis of items:

- The response to the items in the "Yes" category shows that respondents identify direct changes to instructional practice ("cooperative learning" and "reading program" items) in addition to recognition programs as changes to school improvements.
- The responses to the "No" items indicate that schools were less likely to introduce changes to structural elements; that is, those that tend to emphasize first order changes.
- There were a substantial number of responses in the "Don't know" category, especially among the "Split Opinion" group of items. In combination with the general equivalence of "yes" and "no" responses, this indicates the extent to which respondents showed no definitive direction in their opinion of grouping or required time for math and reading. An inspection of this group of items suggests that changes did not emphasize items directly related to instructional practice; rather, the changes were precursors to changes in instructional practice.

**Table 5**  
**WES Items – Percentages Indicating Change That Has Taken Place**

WES Items				
<i>Please indicate, to your knowledge, whether the following changes have taken place.</i>				
	Yes	No	I don't Know	N
<b><u>Yes</u></b>				
• We have implemented recognition programs (either staff or student).	66.9	16.0	17.0	1996
• We implemented cooperative learning.	62.6	20.0	17.5	1994
• We implemented a specific reading program.	73.1	15.1	11.8	2012
<b><u>No</u></b>				
• We adopted a block schedule.	38.8	51.7	9.5	1982
• We reorganized into multi-grade teams.	23.5	59.5	17.0	2005
• We reorganized the school into smaller learning communities.	36.2	47.5	16.3	1997
<b><u>Split Opinion</u></b>				
• We increased minimum required minutes of reading for all students.	43.0	30.6	26.4	2016
• We increased minimum required minutes of math for all students.	31.3	38.3	30.4	2010
• We eliminated course offerings.	25.8	31.5	42.8	1992
• We began heterogeneous grouping of students.	34.4	29.5	36.0	1978
• We began homogeneous grouping of students.	35.0	28.8	36.2	1972
• Our district has increased graduation requirements.	34.3	16.0	49.7	1996
Response Categories: 1 – Yes				
2 – No				
3 – I don't know				

## Factors Important to Educational Practice

Table 6 shows six items that teachers ranked (in order of importance) according to their future work as educators. The figures in the table are the percentages of teachers who indicated each rank for each item. Items are ranked from highest (1 = “most important work to be done in the near future”) to lowest (6 = “least important”).

Table 6  
Percentage of Teacher Opinions for Items Most and Least Important to Their Future Work.

RANK	WES Rank Order Items					
	<i>rcollab</i> <sup>a</sup>	<i>raligninst</i> <sup>b</sup>	<i>rdecide</i> <sup>c</sup>	<i>raligncurr</i> <sup>d</sup>	<i>rassess</i> <sup>e</sup>	<i>rcurr</i> <sup>f</sup>
1	50.0	9.2	11.1	18.3	5.0	7.4
2	13.4	24.3	21.3	18.5	15.1	7.8
3	18.3	19.1	20.4	17.3	17.6	7.1
4	9.4	18.6	20.6	16.9	20.0	14.0
5	5.7	18.2	19.8	19.3	27.5	9.2
6	3.3	10.6	6.7	9.7	14.8	54.6

<sup>a</sup> Working collaboratively to improve instructional practices

<sup>b</sup> Aligning instructional practices to state standards/GLEs

<sup>c</sup> Using student assessment data to make decisions

<sup>d</sup> Aligning curriculum to state standards/GLEs

<sup>e</sup> Receiving better student assessment data

<sup>f</sup> Adopting a new curriculum

It is evident that teachers have similar opinions regarding the most and least important initiatives for future work. However with the exception of the least important task, teachers seem to have various notions as to which initiatives should occur subsequent to the most crucial changes. Examining each of the items reveals primary differences among teachers’ appraisal of what constitutes the most vital educational practices.

By far the most important needs expressed by the teacher respondents are to work collaboratively to improve their instructional practices and to align their instructional practices to state standards. Almost two-thirds (63.4%) of the respondents who ranked these items chose these as number one or number two priority. These are noteworthy responses, especially the strong ranking for the need for collaboration. The overall theme is that, of all the possible needs for improving their work as teachers, they need to work with their colleagues to jointly improve instruction. This finding is amplified by its contradistinction to the other findings; namely, the overwhelmingly low response to adopting a new curriculum and other practices that do not directly impact instruction. For example, 15.2% of the respondents ranked “adopting a new curriculum” as number one or two priority; and in fact more than half (54.6%) ranked this item dead last in priority.

In some ways, this is an unexpected finding. How likely is it to assume that teachers would point out the need to improve their own teaching? A careful examination of the ranking items provide some signals for the importance of this finding. With the exception of the first two items, the remaining items focus on practices that are important but that bear only indirect influences on school improvement. We might say that these represent —~~fst~~ “first order” changes in that they are the possible —~~means~~ “means” by which change can occur, not —~~ends~~ “ends” in themselves. Adopting a new curriculum may result in improved learning, but not necessarily so unless teachers and other school leaders capitalize on the specific features of the new curriculum that can be better understood and expressed by teachers in the learning context.

Collaborative learning and aligning instructional practices are more likely to represent —~~sc~~ “second order” changes in that they can more likely impact learning —~~directly~~ “directly.” Teachers appear to recognize that they need collaborative collegial learning especially in order to have a meaningful impact on instructional practices that lead to school improvement and student learning. While such a high ranking for collaboration may indicate an unusual degree of self-criticism, it also signals that teacher respondents can discern the difference between first and second order changes.

### SUMMARY AND IMPLICATIONS

The purpose of this study was to explore the nature of recent educational reform efforts in Washington State and to determine what educators believe to be the most important future areas of focus. In particular, we wanted to determine whether school-wide improvement efforts (i.e. School Improvement Plans (SIPs), School Improvement Teams (SITs), professional development, etc) were making a difference for teachers. To do so we explored issues related to school and classroom improvement efforts and the impact at the school, teacher, and student levels. In addition, we asked teachers to prioritize their greatest needs in the future if they are to realize the goals of this reform (ALL students achieving).

An important part of the Theory of Change in Washington State over the last several years has been the idea that if schools have a school improvement plan, it will help them develop and deliver a more effective educational program to students. So a logical question to explore was whether the SIP does play an important role. In a nutshell teachers in this research project indicated that efforts over the last several years have led to more effective improvement planning led by clearly articulated goals. They believe the SIP and the SIT play important and effective roles. Over seventy-six percent of the respondents agreed that “Our School Improvement Plan plays an important role in our school,” and approximately 60% of the respondents agreed that “Our school improvement team is effective in leading change efforts.”

Related to these positive findings, teachers indicated that both administrators and teachers were keys to their successes. Almost eighty-five percent of the respondents agreed that “Building administrator(s) have had a key role in improving our school,” and eighty-one percent of the respondents agreed that “Teacher leaders have had a key role in improving our school.”

One alarming finding among the data relates to an educational reform objective; that reform efforts should lead to more personalization, knowing students and their work well. However, in the midst of other positive responses, teacher respondents indicated that they do not have more time to get to know their students. Only twenty-two percent indicated that, “I have more time to get to know my students as a result of our school improvement efforts.”

In the 1997 research that resulted in the Second Order change terminology, there were three factor scales that indicated second order change. The three scales in that survey were (1) Fundamental Change Scale, (2) Collaboration Scale, and (3) Instruction Scale (Baker 1998). Together these three factors represented second order, fundamental change pointing toward the goals of the educational effort.

In the current study, it is clear that over the last several years, teachers have been attempting to focus on more fundamental change; more collaboration, focus on instruction, and beliefs about ALL students achieving driving change. However, teachers also indicated these efforts have not had an effect yet on them as teachers; both in what teachers say they have been trying to do and what they see they need to do in the future.

This is by far the most important finding of this project. Teachers indicated that they want to focus on instruction and collaborate with colleagues, that the reform efforts have not yet provided this, and they state loudly and clearly that the most important thing to provide them in



their future are skills and time related to collaborating with colleagues to improve their instruction and to align it with state standards. Likewise, they believe that we should not give up on meeting the needs of ALL students.

To state it even more directly from the research, almost two-thirds of all respondents indicated the most important work for them in the near future was to change their instruction. To do so, they indicated that working collaboratively to improve instructional practices and aligning instructional practices to state standards/GLEs are their two most important tasks moving forward. This overwhelming response has far-reaching implications and cannot be ignored by reform leaders.

The data seem to indicate that we are finally on the road to second order change. Teachers fundamentally want to change their instruction. And approximately ninety-five percent of the teacher respondents indicated that they think it is important to develop/continue the focus on success for ALL students. Those who have been part of the educational reform since 1993 know how difficult it has been and how much work has gone into reinventing schools. Teachers have worked hard and it has been difficult to sustain the belief that all students can learn. Testing has brought pressure to bear on the individual teacher level. Yet in the midst of all this, the respondents indicated overwhelmingly to maintain the fundamental shift in thinking that school is about educating ALL students.

An implication of these findings for school leaders is that collaboration to improve instruction should be part of the school goals and school improvement plan. So often school improvement plans focus on structural (first order change topics). Teachers in this study, however, are clearly sending the signal that they have an interest in fundamental collaborative instructional (second order) change. This is a very promising finding for the overall reform goals.

## REFERENCES

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